CLAIMS

What is claimed is:

1. A heating crucible for an organic thin film forming apparatus, the heating crucible comprising:

a main body in which to contain an organic substance;

a cover provided on the main body, the cover formed of an insulating material and having a nozzle through which a gaseous organic substance comes out from the main body;

a cover heater formed as a thin film type on the top surface of the cover; and

a body heater heating the main body.

2. The heating crucible of claim 1, wherein the cover heater is formed as a single wire pattern laid over the entire top surface of the cover, the single wire pattern having a positive and a negative terminal at respective ends of the single wire pattern.

3. The heating crucible of claim 2, wherein the single wire pattern of the cover heater is formed of platinum by printing.

4. The heating crucible of claim 1, wherein the cover further comprises at least one embedded thermocouple.

5. The heating crucible of claim 1, further comprising a heat-resistant layer on the surface of the cover heater.

6. The heating crucible of claim 5, further comprising a reflective layer between the cover heater and the heat-resistant layer.

7. The heating crucible of claim 1, wherein the insulating material forming the cover has a good heat radiation property.

8. The heating crucible of claim 7, wherein the cover is formed of alumina.

9. The heating crucible of claim 1, wherein the cover heater is formed in a concentric pattern around the nozzle.

10. The heating crucible of claim 1, wherein the cover heater is formed by printing a conductive paste on the surface of the cover and sintering the printed conductive paste, wherein the conductive paste comprises metal particles and metal oxide.

11. The heating crucible of claim 1, wherein the cover heater is comprised of a thin graphite layer formed on the cover by chemical vapor deposition.

12. The heating crucible of claim 1, wherein the insulating material forming the cover is comprised of a thermally conductive ceramic material.

13. The heating crucible of claim 12, wherein the thermally conductive ceramic material comprises ceramic nitrides or ceramic carbides.

14. The heating crucible of claim 13, wherein the ceramic nitride is aluminum nitride.

15. The heating crucible of claim 13, wherein the ceramic carbide is silicon carbide.

16. The heating crucible of claim 1, wherein the cover heater is formed as a heating block by spray coating a heat emitting material onto the cover.

17. The heating crucible of claim 1, wherein the main body is formed of the insulating material forming the cover, and the body heater is formed as a thin film type on the outer wall of the main body.

18. The heating crucible of claim 17, wherein the body heater is formed as a single wire pattern laid over the entire outer wall of the main body, the single wire pattern having a positive and a negative terminal at respective ends of the single wire pattern.

19. The heating crucible of claim 18, wherein the single wire pattern of the body heater is formed of platinum by printing.

20. The heating crucible of claim 18, wherein the body heater is further formed over the bottom of the main body.

21. The heating crucible of claim 17, wherein the insulating material forming the main body is a ceramic material.

22. The heating crucible of claim 17, wherein the main body further comprises at least one embedded thermocouple.

23. The heating crucible of claim 17, further comprising a heat-resistant layer on the surface of the body heater.

24. The heating crucible of claim 23, further comprising a reflective layer between the body heater and the heat-resistant layer.

25. The heating crucible of claim 17, wherein the insulating material forming the main body has a good heat radiation property.

26. The heating crucible of claim 25, wherein the main body is formed of alumina.